

July 14th

William Charles Norris

Born: July 14, 1911;
Red Cloud, Nebraska
Died: August 21, 2006

Norris entered the computer business just after WWII, when he formed Engineering Research Associates (ERA [Jan 00]) along with Howard Engstrom and Ralph Meader.

In 1955, he joined Sperry Rand, which had just been created from merging Remington Rand [Jan 25] and Sperry. But Norris and several other soon became frustrated with management decisions, and left to form Control Data Corporation (CDC) [July 8]. Sperry Rand filed a suit against Control Data in 1958, but settled out of court in 1962.

The CDC 6600 [Sept 00] was seen as a real threat by IBM, which quickly announced plans to build a specialized System 360 [April 7] which would be much faster than the 6600. (Inside IBM, it was nicknamed the "6600 killer"). The super-fast 360 never appeared, but its announcement affected sales of the 6600 nevertheless. Consequently, Norris launched a lawsuit against IBM, and was awarded \$600 million in damages.

Norris licensed PLATO [Aug 22], the computer-assisted instruction system in 1976, which he saw as a solution to the problem of higher education for people unable to afford university. Sadly, his PLATO programme never became profitable, costing the company an estimated \$600 million. In 1986 Norris stepped down as CEO, and the PLATO service was cancelled soon after.

Norris was well known for promoting various social programmes. At CDC in Minneapolis, he encouraged employees to grow vegetables

in the huge garden adjoining the headquarters. He also moved the old windmill from his father's ranch onto the lawn, so it was visible from his office.

Jay Wright Forrester

Born: July 14, 1918,
Anselmo, Nebraska
Died: Nov 16, 2016

Forrester was the principal developer of the groundbreaking Whirlwind [April 20], whose design was later used as the basis for the SAGE air defense system [June 26]

While working on the Whirlwind, Forrester came up with the idea of core memory [May 11], which became standard for computers until it was supplanted by solid state RAM in the mid-1970s.



Jay W. Forrester, sat in front of the Whirlwind. (C) MIT Archives.

Forrester also founded the field of system dynamics – the simulation of complex business, economic, and environmental systems. In particular, he was interested in how the Earth's natural systems (e.g. its climate) interacted with human-created systems (e.g. cities, nations, and industries).

Four of Forrester's students wrote the influential book, "The Limits to Growth" [June 1], which inspired Will Wright to create SimCity [Feb 2].

The programming issues raised by system dynamics also

prompted the creation of the DYNAMO simulation language [March 21].

Forrester is believed to have created the first computer animation, a "jumping ball" drawn by an oscilloscope connected to the Whirlwind [Dec 16].

Jeffrey Chuan Chu

Born: July 14, 1919;
Tianjin, China
Died: June 6, 2011

Chu was a core member of the team that built the ENIAC [May 00], and also contributed to a variety of later machines: AVIDAC [Jan 28], ORACLE, MANIAC [March 15], and was chief engineer of the LARC project [March 00]. At Honeywell, he was director of engineering for the 200 series [Dec 20].

In later life, he used his experience to promote computing in Taiwan and mainland China. In the early 1970s, Chuan helped plan Taiwan's Hsinchu Science-based Industrial Park, which became a major center of the semiconductor industry.

In his spare time, he liked hunting for venison in the woods, equipped with just a bow. He considered himself lucky if he caught a glimpse of a deer.

First Multi-Touch July 14-16, 1976

Roy Kaplow and Michael Molnar presented a paper on their enhanced-input terminal system (EITS) at the SIGGRAPH'76 conference in Philadelphia. It included a "cross-wire", touch-sensitive input panel, which was very likely the first multi-touch screen. Their touch "keyboard" was completely redefinable, including not only the keys/buttons/icons, but also the layout.

Another aspect of multi-touch was the development of standard gesture commands, perhaps the most important being pinch-to-zoom. One origin for that operation may be Myron Krueger's [March 1] Videoplace from 1985, although it involved two hands not fingers. Another possibility is Dean Rubine's "Rotate-Scale-Translate" gesture from his thesis [Dec 00].

"Single touch" screens date back much further, based on a range of technologies, including resistive [Oct 7], capacitive [Aug 2], and infrared [Nov 27].

386BSD July 14, 1992

The first version of UNIX for Intel 80386 processors, 386BSD version 0.1, was released by Lynne and William Jolitz. It's often said to mark the beginning of the Open Source [Feb 3] OS movement. It also featured several technical innovations, including a modular kernel design, ring buffers, and role-based security.

It was based on portions of 4.3BSD Net/2 [March 9] along with code that was documented in an 18-part series, "Porting UNIX to the 386", published by the Jolitzes in *Dr. Dobbs Journal* in 1991 [Jan 00].

Later, due to differences of opinion between the Jolitzes and other maintainers, the FreeBSD project [Nov 1] was founded in 1993. The NetBSD project [May 19] was also formed at around the same time, with the aim of unifying 386BSD with other strands of BSD development.

386BSD is often confused with BSD/386 which began in 1991 as a proprietary version of BSD developed by Berkeley Software Design. BSD/386 was later known as BSD/OS and BSDi.

Happy Ripping Day July 14, 1995

This celebrates the day when the ".mp3" filename extension was chosen by Karl-Heinz Brandenburg's [June 20] team at the Fraunhofer Institute to label files using their audio data compression format. They had also been considering names such as ".bit" and ".son".

"mp3" is short for MPEG-1 Audio Layer III or MPEG-2 Audio Layer III. There's also a MPEG 2.5 to better support lower bit rates, but it's not a recognized standard. Incidentally, MPEG is the acronym for the Moving Picture Experts Group

An e-mail from a member of Brandenburg's team, Jürgen Zeller, to the rest of the institute announced the result and urged "for WWW pages, shareware, demos, and so on, the .bit extension is not to be used anymore. There is a reason for that, believe me."

Supposedly, by the late 1990s, "MP3" had replaced "sex" as the most queried term on search engines.

Opera July 14, 1996

Work on the Opera web browser began in 1994 as a research project at Telenor, the largest Norwegian telecommunications company. In 1995, it was split off into a separate company called Opera Software ASA, with Håkon Wium Lie [July 26] as the chief technical officer. The browser was released publicly on this day, starting at version 2.0, and only running on MS Windows. It was the first browser to focus on adhering to W3C standards [Oct 1].

In May 2013, Opera 15 was fully rewritten to use the Blink layout engine favored by Google's Chrome browser [Sept 2], replacing Opera's in-house Presto engine, which had been in use for nearly a decade.

In November 2016, the Opera name and web browser business were sold to a Chinese consortium, Golden Brick Capital Private Equity Fund I Limited Partnership, for \$600 million.

The Blair Witch Project July 14, 1999

"The Blair Witch Project" is a supernatural horror film written, directed, and edited by Daniel Myrick and Eduardo Sánchez. It tells the supposedly real story of three student filmmakers who have a rather unhappy camping experience near Burkittsville, Maryland. It was the first widely seen film marketed primarily through the Web.

Artisan Entertainment released the movie across the US on this day, along with a website based on the conceit that the film was edited together from recovered videotapes. The site included police reports and interviews with grieving parents.

Artisan's full-page ad in *Variety* read: 'Blairwitch.com 21,222,589 hits to date.' This was the first advert promoting a film's website rather than the film itself.

During the annual summer carnival in Burkittsville, the local Ruritan Club now features a "Bur-Witch" sandwich, a cheeseburger with ham, egg, and horseradish sauce on a sesame seed bun.
